

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER– IV EXAMINATION – WINTER - 2018

Subject Code: 3640013

Date: 29/11/ 2018

Subject Name: Function Programming with Java

Time: 10.30 am to 1.00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** State whether the following statements are True or False. Give justification for your answers: **07**
1. Color.Green is a valid color in Java.
 2. BorderLayout.NORTH is a valid option in Java.
 3. The package 'javax' indicates obsolete version of Java.
 4. updateUI() method can be called using JMenu object.
 5. sing() method of AudioClip object can be used to play a song.
 6. All listener interfaces have corresponding adapter classes.
 7. For an applet to work properly, it is necessary to use codetype attribute of the object HTML tag.
- (b)** List and explain any seven setter methods of JFrame. **07**
- Q.2 (a)** What is use of setLayout(null) method? With suitable example of code snippets, describe the use of any three layouts. **07**
- (b)** Including constructors, list and explain with syntax any seven methods of JTextArea class. **07**
- OR**
- (b)** With suitable example from swing package, explain MVC design pattern. **07**
- Q.3 (a)** What is difference between Semantic events and Low-level events? Give an example of each of these types. Explain the Java Event Delegation Model. **07**
- (b)** Explain the component hierarchy relationship among Container, Frame, Panel, Applet, Window, JPanel and JFrame. **07**
- OR**
- Q.3 (a)** With suitable code snippets for an example of button click, explain the entire process of handling an event in java. **07**
- (b)** Name any three 'Look and Feel' types of Java. Give any two differences between AWT and Swing. **07**
- Q.4 (a)** List and explain any seven attributes of applet HTML tag. **07**
- (b)** List and explain the four JDBC driver types. Explain the terms: LOB, CLOB and BLOB. **07**
- OR**
- Q.4 (a)** Explain the stages of applet life cycle with corresponding methods. **07**
- (b)** What is full form of JDBC? What is use of executeQuery(), executeUpdate() and execute() methods? **07**
- Q.5 (a)** What is the default port number of RMI? What is difference between Parameter Marshalling and Parameter Un-marshalling? With suitable diagram for RMI, explain the role of client, server, registry and stub. **07**
- (b)** What is the main use of Java Beans? With a suitable of each, explain the use of JAR file, Manifest file and PropertyEditor interface. **07**

OR

- Q.5** **(a)** List and explain any seven RMI loggers. **07**
 (b) Which main package is required for working with Beans in Java? What is **07**
 difference between Introspection and Reflection? With a suitable example of
 each, explain Simple, Indexed, Bound and Constrained Properties.
